IN THE CLAIMS

Please amend the claims as follows:

1 (currently amended). An optical coating, comprising:

at least one anti-reflective layer having an admittance between that of a gain media and an adjacent media;

an absentee layer having an index of refraction greater than said gain media and having a thickness corresponding to a number of half waves,

wherein the number of half waves is 1-7.

2 (original). The optical coating as recited in claim 1 wherein a thickness of said absentee layer comprises:

$$d = \frac{m\lambda}{2n}$$

where d is the thickness of said absentee layer, λ is a center wavelength to be output by the gain media, n is the refractive index of the absentee layer, and m is the number of half-waves.

3 (original). The optical coating as recited in claim 2 wherein said gain media comprises InGaAsP.

4 (original). The optical coating as recited in claim 3 wherein said anti-

reflective layer comprises:

a first layer comprising Ta_2O_5; a second layer comprising SiO_2; and said absentee layer comprises Si.

5-6 (cancelled)

7 (original). The optical coating as recited in claim 4 wherein said adjacent media comprises air.

8 (currently amended). A method to mitigate reflection, comprising:

applying an absentee layer having a thickness corresponding to a number of half wave thicknesses to an optical media, said absentee layer having an index of refraction greater than that of said optical media,

wherein the number of half wave thicknesses is 1-7; and

applying an antireflective layer comprising at least one material having an admittance between that of said optical media and an adjacent media.

9 (original). The method as recited in claim 8, wherein the thickness of the absentee layer comprises:

$$d = \frac{m\lambda}{2n}$$

where d is the thickness of said absentee layer, λ is a center wavelength to be output by the gain media, n is the refractive index of the

absentee layer, and m is the number of half-waves.

10 (original). The method as recited in claim 8 wherein said optical media comprises a laser gain media.

11 (original). The method as recited in claim 10, wherein said laser gain media comprises InGaAsP and said absentee layer comprises Si.

12 (original). The method as recited in claim 11, wherein applying said anti-reflective layer comprises:

applying a first layer comprising Ta_2O_5; applying a second layer comprising SiO_2 and; wherein said absentee layer comprises Si.

13-14 (cancelled).

15 (original). The method as recited in claim 8 wherein said adjacent media comprises air.

16 (original). The method as recited in claim 9 further comprising:

calculating a plurality of halfwave thickness for the absentee layer by allowing a plurality of wavelengths in a range to be the center wavelength λ;

arithmetically calculating an optimal thickness for the absentee layer using said plurality of halfwave thicknesses.

17 (currently amended). A laser comprising:

a tunable gain media to output a range of wavelengths around a center wavelength λ;

at least one anti-reflective layer having an admittance between that of said gain media and an adjacent media;

an absentee layer having an index of refraction greater than that of said gain media, said absentee layer having a thickness d determined as:

$$d = \frac{m\lambda}{2n}$$

where d is the thickness of said absentee layer, λ is the center wavelength to be output by the gain media, n is the refractive index of the absentee layer, and m is an integer number of half-waves selected to optimize performance of said antireflective layer over said range of wavelengths,

wherein the integer number of half waves is 1-7.

18 (original). The laser as recited in claim 17 wherein said adjacent media is air.

19-20 (cancelled).

21 (original). The laser as recited in claim 17 wherein sad gain media comprises InGaAsP.

22 (original). The laser as recited in claim 21 wherein said antireflective layer comprises:

a first layer comprising Ta_2O_5;

a second layer comprising SiO_2; and

said absentee layer comprises Si.